CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.09/KRIDL/WMM/Gradation/2014-15

05.08.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements and Asphalting to BEL Layout and NTI Layout Balance roads in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.

Reference : AEE/VP/34/2014-15 Dated: 03.08.2014

Date of Testing : 05.08.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25100**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	850	850	3.4	96.6	95-100
22.4	5515	6365	25.4	74.6	60-80
11.2	5775	12140	48.4	51.6	40-60
4.75	4005	16145	64.3	35.7	25-40
2.36	3950	20095	80.1	19.9	15-30
0.600	2240	22335	89.0	11.0	8-22
0.075	2480	24815	98.9	1.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ವಿದ್ಯಾರಣ್ಯಪುರ ಉಪ ವಿಭಾಗ
ಯಲಹಂಕ ವಲಯ,
ಬೃ. ಬೆಂ. ಮ ಸಾ., ಬೆಂಗಳೂರು-97.

M/s. Civil-Tech Consultants & Engineers
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CIVIL-TECH CONSULTANTS AND ENGINEERS

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Job No.: CTCE/BBMP/W.No.09/KRIDL/SDBC/Bitumen/2014-15 22.08.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

As per IS2386 and IRC:SP:11-1984

CLIENT	**Asst. Executive Engineer,** Vidyaranyapura Sub Division, BBMP,
AGENCY	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to BEL Layout and NTI Layout Balance roads in Ward No.09, Vidyaranyapura Sub Division, BBMP, Bangalore.
REFERENCE	AEE/VP/34/2014-15 Dated: 03.08.2014
SAMPLE I/D	Asphalting to BEL Layout and NTI Layout road in Ward No.09.
DATE OF TESTING	22.08.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	475	475
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	25	25.00
7. Bitumen content in %	5.00	5.00
8. Average	**5.00**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	39.63	8.34	8.34	91.66	90-100
4.75	260.2	54.78	63.12	36.88	35-51
2.36	53.21	11.20	74.32	25.68	24-39
1.18	43.25	9.11	83.43	16.57	15-30
0.3	29.36	6.18	89.61	10.39	9-19
0.075	27.14	5.71	95.32	4.68	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	29.32	5.86	5.86	94.14	90-100
4.75	242.6	48.52	54.38	45.62	35-51
2.36	90.23	18.05	72.43	27.57	24-39
1.18	51.26	10.25	82.68	17.32	15-30
0.3	32.63	6.53	89.21	10.79	9-19
0.075	25.32	5.06	94.27	5.73	3-8

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